Qualifying for Unemployment Insurance

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Purpose

This brief summarises a study that is a component of a major new evaluation of the UI regular benefits program in Canada. This particular study focuses on the rationale for a public unemployment insurance system by examining the impact of the entrance requirement on labour supply behaviour. It is the first of a three-part analysis of temporary income protection and the insurance role of UI.

Introduction and background

The major declared objective of the UI program is the provision of insurance against the interruption of earnings due to unemployment. This may be called the *insurance* or *efficiency objective*, in that the probable failure of private UI markets to exist on a comprehensive basis provides the fundamental efficiency rationale for publicly funded UI.

The extent to which the insurance objective can be achieved is constrained by two phenomena which exist in any insurance market: adverse selection and moral hazard. Adverse selection arises when those who are most likely to purchase insurance are those who are most at risk. Moral hazard arises when those who are insured alter their behaviour in a manner which makes it more likely that they will receive an insurance benefit payment. These two effects make the public provision of insurance more costly to society of operating such a program.

In the UI program, problems due to adverse selection are substantially minimised by having compulsory coverage. In Canada, where UI coverage is over 90 per cent, the concern on adverse selection is mainly limited to the recent growth of non-standard employment (e.g., part-time work, out-sourcing etc.) which at present is not covered. However, moral hazard effects remain a central concern for UI and these are an important focus of this study.

The extent to which the UI program meets the insurance objective depends on the level and duration of benefits received. The more generous the benefits (i.e. the shorter the waiting period, the greater the benefit/wage replacement rate, the longer the maximum benefit duration), the greater the value of UI as insurance, but also the greater are the moral hazard effects of UI. As a consequence, there is a trade-off between meeting the insurance objective and minimising costly side effects due to moral hazard.

UI also has evolved to have equity objectives relating to the distribution of income among individuals and regions. The extent to which UI

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should pursue equity objectives and the degree to which trade-offs should be made between the insurance and distributional objectives are important issues in any overall evaluation of the UI program.

The larger study on the insurance or temporary income protection role of UI addresses a number of questions related to the trade-offs that arise in meeting the insurance objective because of moral hazard effects, and the trade-offs that may exist between the insurance and equity objectives of the program. These evaluation questions are intimately related to questions regarding the effects of UI parameters such as the benefit rate, the maximum duration of benefits and entrance requirement on labour force participation, and employment and non-employment durations.

The entrance requirements for UI are a key tool for battling moral hazard problems in UI use and the focus of this particular analysis. Lengthening the entrance requirement will make it less likely that individuals will enter the work force or lengthen job spells in order to qualify for UI. Setting very high entrance requirements may also discourage the use of UI to subsidise seasonal work patterns. Alternatively, a short entrance requirement may make it less costly for workers and firms to terminate poor job matches, allowing workers to expend more effort in searching for a better match. For both reasons, one would like to know whether the entrance requirement has a significant impact on employment durations and how individuals adjust to changes in the entrance requirement.

This particular study attempts to answer three main questions:

1. does the entrance requirement have a significant impact on job duration?
2. if the answer is yes, how does a change in the entrance requirement alter the distribution of job durations? and
3. how do individuals adjust to increases in the entrance requirement?

Data and evaluation methodology

The empirical work uses the 1989 and 1990 Labour Market Activity Survey (LMAS): a large representative sample of Canadians which contains retrospective information on work patterns and job and personal characteristics for the sample year. A special version of the LMAS is used in which place of residence is coded as the UI region in which the individual lives rather than the province, as is done on the Statistics Canada public use data set. Since UI parameters vary by UI region and most provinces contain several such regions, information on the UI region is critical to accurately assessing the effects of UI on individual behaviour.

The availability of LMAS data for these years is key to the evaluation design. They focus on an event that is amenable to natural experimental analysis, i.e. the temporary suspension in 1990 of the variable entrance requirement (VER). This event created an increase in the number of weeks an individual must work to qualify for benefits, and is expected to generate different behaviour before and after the change, as well as different responses across individuals at a specific time. In this case, a comparison can be made of the distributions of job durations under the VER which prevailed in 1989 to that in 1990 when a fixed entrance requirement of 14 weeks prevailed in all regions.

The analysis focuses on behaviour in "maximum entitlement regions", UI regions with an unemployment rate equal to or greater than 11.5 percent throughout 1989 and 1990. In these regions, 10 weeks of employment in 1989 provided a UI claimant with up to 42 weeks of benefits, whereas from January 6 to November 18, 1990, 14 weeks of employment were required to qualify for benefits. In these maximum entitlement regions, the only difference between 1989 and 1990 in the UI program parameters is this change in the entrance requirement. Because all other program features are the same, one can examine the effects of a change in the entrance requirement holding constant other UI regulations.

Methodologically then, the study combines natural experimental analysis and structural econometric modelling. The analysis of LMAS data employs a hazard function framework which focuses on the hazard or exit rate from employment. Comparisons of the hazard rates for the two years allow us to identify the effects of the change in the entrance requirement.

Key findings

Overall, there is strong evidence that the UI entrance requirement does alter employment choices.

Increasing the entrance requirement leads to significant increases in employment spell durations at or near entrance requirement weeks. Specifically, the sharp increase or "spike" in the job leaving rate observed at 10 weeks in 1989 moves to 14 or more weeks in 1990.

The increase in the entrance requirement led to a 1.5 week increase in average employment duration and a 0.4 percentage point drop in the unemployment rate in the maximum entitlement regions.

Low wage workers in seasonal industries are the most affected by the changes.

The fact that employment duration changes are much more pronounced in spells ending in layoffs than in those ending in quits suggests that the observed adjustment involves firms as well as workers.

Biographical notes

Craig Riddell is Professor and Head of the Economics Department at the University of British Columbia. He has published extensively in scholarly and professional journals, mainly research in the areas of industrial relations, labour economics and public policy. He was the research co-ordinator for Labour Markets and Labour Relations for the Royal Commission on the Economic Union and Development Prospects for Canada, 1983-1985. Professor Riddell is currently the academic co-chair of the Canadian Employment Research Forum.

David Green is currently an Assistant Professor of Economics at the University of British Columbia, where he pursues his teaching and research interests in labour economics, applied econometrics and economic history.

"Qualifying for Unemployment Insurance: An Empirical Analysis for Canada" by David A. Green and W. Craig Riddell, is part I of a three-part study on ***Temporary Income Protection and the Insurance Role of UI*** that is in preparation for publication by Human Resources Development Canada as an Insurance Program evaluation report, 1994.

Copies of the full technical report (when finalised) and further copies of this summary are available from:

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